

Title of the Invention

DRAG HARNESS

Technical Field of the Invention

This invention pertains to a drag harness of a type used by a rescuer, such as
5 a firefighter, to drag a wearer lying in a supine position, from a perilous situation.

Background of the Invention

Drag harnesses of the type noted above are exemplified in United States
Patents No. 4,682,671, No. 4,854,418, and No. 6,205,584 B1. Such harnesses, as
known heretofore, tend to be somewhat uncomfortable to their wearers, principally
10 because such harnesses, as known heretofore, have arm loops that are not
stabilized and, therefore, can pinch the arms of their wearers, shift and become un-
proportional, or ride down the backs of their wearers and, additionally, because
such harnesses do not support the heads of their wearers, while their wearers are
being dragged via such harnesses.

Summary of the Invention

This invention provides a drag harness comprising two arm loops, each of
which has a fixed length and each of which is adapted to receive one arm of a
wearer, and a drag grip, which is joined to the arm loops solely at a common
juncture and which is adapted to extend above the shoulders of the wearer and
20 behind the head of the wearer, if the wearer is standing.

Preferably, the drag grip is a drag loop, which has a fixed length. A rescuer
grasping the drag grip with one hand or inserting one arm through the drag loop, if
the drag grip is a drag loop, can drag the wearer, via the drag harness, while the
wearer is lying in a supine position. Preferably, the drag grip, the common

juncture, or both are adapted to support the head of the wearer, as the wearer is being dragged, via the head harness, while the wearer is lying in a supine position.

Preferably, the drag harness is made from strapping. In one contemplated embodiment, the drag harness is made from a single piece of strapping, which may be advantageously made from a flame-resistant material but which may be alternatively made from conventional strapping material. In another contemplated embodiment, in which the arm loops are made from a single piece of conventional strapping material, the drag grip is made from a separate piece of strapping, which may be advantageously made from a flame-resistant material.

10 **Brief Description of the Drawings**

Figure 1 is a top view of a supine person wearing a drag harness embodying this invention and made from strapping sewn at a common juncture. Figure 2 is a bottom view of the supine person wearing the same harness. Further, Figures 1 and 2 illustrate one arm of a rescuer utilizing the drag harness to drag the supine person wearing the drag harness, head first.

Figure 3 is a bottom view of the same harness, apart from the person. Figure 4 is a bottom view of the same harness, as broken away to reveal some constructional details.

Figure 5 is a fragmentary detail of an alternate construction, in which the common juncture is riveted, rather than sewn.

20 **Detailed Description of the Illustrated Embodiments**

As illustrated in Figures 1 and 2, a drag harness 10 embodying this invention is being worn by a supine person and is being utilized by a rescuer to drag the supine person, head first. Broadly, the drag harness 10 comprises two arm loops 20 and a drag loop 30, which is joined to the arm loops 20 at a common

juncture 40. Each arm loop 20 has an equal, fixed length, and the grip loop 30 has a fixed length. Preferably, as illustrated in Figures 2 and 3, the common juncture 40 is sewn. Alternatively, as illustrated in Figure 5, the common juncture 40 is riveted, via one or more rivets 50.

5 Each arm loop 20 is adapted to receive one arm of a wearer, *i.e.*, a person wearing the drag harness 10. The drag loop 30 is adapted to extend above the shoulders of the wearer and behind the head of the wearer, if the wearer is standing. Thus, a rescuer grasping the drag loop 30 with one hand or inserting one arm through the drag loop 30, as illustrated in Figures 1 and 2, can drag the 10 wearer, via the drag harness 10, while the wearer is lying in a supine position.

15 Preferably, as illustrated in Figures 1, 2, 3, and 4, the drag harness 10 is made from strapping. In one contemplated embodiment, the drag harness 10 is made from a single piece of strapping, which may be advantageously made from a flame-resistant material, such as Nomex™ material or Kevlar™ material, but which may be alternatively made from conventional strapping material, such as 20 nylon or leather. In another contemplated embodiment, in which the arm loops 20 are made from a single piece of conventional strapping material, such as nylon or leather, the drag loop 30 is made from a separate piece of strapping, which may be advantageously made from a flame-resistant material, such as Nomex™ material or Kevlar™ material.

Advantageously, because the arm loops 20 have fixed lengths, the arm loops 20 are stabilized and, therefore, do not end to pinch the arms of the wearer, shift and become un-proportional, or ride down the back of the wearer. Additionally, the drag grip 30, the common juncture 40, or both are adapted to support the head

of the wearer, as the wearer is being dragged, via the head harness 10, while the wearer is lying in a supine position.

Advantageously, the drag harness 10 can be stowed in a pocket of a garment worn by a rescuer or can be incorporated into a garment, such as a protective coat 5 worn by a firefighter, as drag harnesses known heretofore have been incorporated into garments.